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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,056	09/30/2003	Karen M. Green	5633	5839

7590 05/27/2005
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M-495
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Spartanburg, SC 29304

EXAMINER

PATEL, VINOD D

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/675,056

Applicant(s)

GREEN ET AL.

Examiner

Vinod D. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED OFFICE ACTION

INTRODUCTION

1. This application/control number 10/675,056 has been examined. Response to non final action is acknowledged. This is second action on the merits of the claimed invention. The application has claims 1-20 pending.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of copending Application No. 10/675,062. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims are written using different words but claimed resulting structure shown in the Figures 1-9 is same for both applications. In addition both applications discloses same specification (20 pages), same abstract (1 page) and same drawings Figures 1-9.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan (US6768086) in view of Dutt (US6174825).

Sullivan (Fig. 1-6) discloses an electrical connection of flexible conductive strands in a flexible body (20) comprising: a flexible planar body (22) having a conductive resistance pathway (24) including at least one conductive resistance flexible strand of material, and a temperature dependent variable resistance pathway (28) having at least one temperature dependent variable resistance flexible strand of material, wherein the conductive resistance pathway and the temperature dependent variable resistance pathway have different routes in the flexible planar body as shown in the Figure 3. The flexible heater according to Figure 4, the conductive resistance pathway (324) includes a plurality of conductive resistance flexible strands of material. The flexible heater according Figure 4, wherein the conductive resistance pathway (324) further includes a supply bus (302) flexible strand of material electrically connected with the conductive resistance flexible strands of material. The flexible heater according to Figure 4, wherein the conductive resistance pathway further includes a first supply bus (302) flexible strand of material and a second supply bus (304) flexible strand of material, and where in the conductive resistance (324) flexible strands of material are electrically connected in parallel between the first supply bus flexible strand of material and the second supply bus flexible strand

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of material. The flexible heater wherein the temperature dependent variable resistance flexible strand of material has a positive coefficient of temperature to resistance (Abstract). The flexible heater (warming blanket fabric) body further includes a plurality of non-conductive flexible strands of material of the flexible planar body are interlaced. The flexible heater according to the Figures 3-5, the conductive resistance pathway crosses the temperature resistance dependent variable resistance pathway in at least one crossing location, wherein the conductive resistance pathway crosses the temperature resistance dependent variable resistance pathway in about a substantially perpendicular direction. The flexible heater (warming blanket fabric) wherein the conductive resistance flexible strand of material comprises a conducting resistance yarn. The flexible heater wherein the conductive resistance pathway includes a plurality of conductive resistance yarns. The flexible heater wherein the conductive resistance pathway further includes a first and a second supply bus yarn, and where in the conductive resistance yarns are electrically connected in parallel between the first supply bus yarn and the second supply bus yarn. The flexible heater wherein the temperature dependent variable resistance flexible strand of material comprises a temperature dependent variable resistance yarn. The flexible heater wherein the temperature dependent variable resistance yarn has a positive coefficient of temperature to resistance. The flexible heater (Figure 3-5) wherein the temperature dependent variable resistance pathway further includes a first connection bus yarn and a second connection bus yarn, and wherein the temperature dependent variable resistance yarns are electrically connected in series by the first connection bus yarn and the second connection bps yarn. The flexible heater (Figure 3-5) wherein the flexible body further comprises a plurality of non-conductive yarns. The flexible heater, wherein the plurality of non-conductive yarns of the flexible planar body are

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woven together. The flexible heater (Figure 3-5) wherein the conductive resistance pathway crosses the temperature resistance dependent variable resistance pathway in at least one crossing location, wherein the conductive resistance pathway crosses the temperature resistance dependent variable resistance pathway in about a substantially perpendicular direction.

With respect to claim 1 and 12, Sullivan does not disclose a pair of flexible locking strands of material disposed longitudinally adjacent to the flexible electrically strand of material, the locking strands of material crossing over each other on either side of a crossing conductive strand of material,

With respect to claim 11, Sullivan does not disclose a pair of flexible electrically conductive strands of material to cross each other on either side of the crossing strand of electrically conductive material.

Dutt discloses (Figure 5), a base fabric (50) woven in an endless leno weave. Base fabric (50) is woven from warp yarns (52,54) and weft yarns (56). Warp yarns (52,54) twist one around the other between picks of weft yarn (56). Warp yarns (52) remain on one side of weft yarns (56). Warp yarns (54) wrap over the other side of weft yarns (56) at each crossing point (58), but wrap under warp yarns (52) between crossing points (58) to mechanically lock the weft yarns (56) in position. This manner of weaving gives firmness and strength to an open weave and prevents slipping and displacement of the warp and weft yarns (column 6, lines 57-67, column 7, lines 1-3). Dutt also discloses (Figure 9), a base fabric (60) woven from warp yarns (62,64) to cross each other on either side of the weft yarns (64). Dutt teaches pair of yarns cross each other on either side of the weft yarns.

With respect to claims 1 and 12, it would have been obvious to provide a pair of flexible locking strands of material disposed longitudinally adjacent to the flexible electrically strand of material, the locking strands of material crossing over each other on either side of a crossing conductive strand of material as taught by Dutt for the warming blanket of Sullivan to mechanically lock the warp and weft of yarns and to provide firmness and strength to an open weave and prevents slipping and displacement of the warp and weft yarns.

With respect to claim 11, It would have been obvious to one of ordinary skill in the art to provide a pair of flexible electrically conductive strands of material to cross each other on either side of the crossing strand of electrically conductive material as taught by Dutt for the warming blanket of Sullivan to mechanically lock the warp and weft of yarns and to provide firmness and strength to an open weave and prevents slipping and displacement of the warp and weft yarns.

Response to Arguments

Applicant's arguments filed on 3/9/05, with respect to the rejection(s) of claim(s) 1-20 under 102 (e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found art reference Dutt (US6174825). Dutt reference teaches a pair of flexible locking strands of material disposed longitudinally adjacent to the flexible electrically strand of material, the locking strands of material crossing over each other on either side of a crossing conductive strand of material, to mechanically lock the weft yarns in position. This manner of weaving gives firmness and strength to an open weave and prevents slipping and displacement of the warp and weft yarns (column 6, lines 57-67, column 7, lines 1-3). Dutt also discloses (Figure 9), a base

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fabric (60) woven from warp yarns (62,64) to cross each other on either side of the weft yarns (64). Dutt teaches pair of yarns cross each other on either side of the weft yarns.


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The art should be both separately considered and considered in conjunction with the previously cited art when responding to this action. Irvin (US5134006) relates to belt reinforcing fabric and belt reinforcing with the same, Webber (US3472289) relates to heating fabric, Kochman (US6369369) relates to soft electrical textile heater.

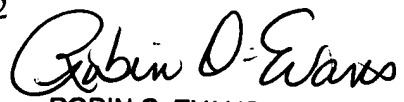
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinod D. Patel whose telephone number is 703-308-5227. The examiner can normally be reached on 7.30 A.M. TO 4.00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 703-305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP


5/19/05
Vinod Patel
Patent Examiner
Art Unit 3742


ROBIN O. EVANS
PRIMARY EXAMINER
5/25/05